Message

From: Wilwerding, Joseph [Wilwerding. Joseph@epa.gov]

Sent: 2/27/2019 11:00:42 PM

To: Bohan, Suzanne [bohan.suzanne@epa.gov]

CC: North, Alexis [North.Alexis@epa.gov]; Loiacono, Sara [loiacono.sara@epa.gov]; Ostrand, Laurie

[Ostrand.Laurie@epa.gov]; Stovern, Michael [Stovern.Michael@epa.gov]; Gallagher, Bob [Gallagher.Bob@epa.gov];

Beeler, Cindy [Beeler.Cindy@epa.gov]; Patefield, Scott [Patefield.Scott@epa.gov]

Subject: O&G info requested - ECEJ Air Research etc

From: Loiacono, Sara

Sent: Thursday, February 28, 2019 1:59 PM **To:** Bohan, Suzanne

 Sohan, Suzanne

 Sohan
 S

Cc: Wilwerding, Joseph < Wilwerding. Joseph@epa.gov>; North, Alexis < North. Alexis@epa.gov>; Beeler, Cindy

<Beeler.Cindy@epa.gov>; Ostrand, Laurie <Ostrand.Laurie@epa.gov>; Stovern, Michael <Stovern.Michael@epa.gov>;

Gallagher, Bob <Gallagher.Bob@epa.gov>; Patefield, Scott <Patefield.Scott@epa.gov>

Subject: RE: O&G info requested

Hi Suzanne -

I apologize for the late addition, but one other item we've been working on that I neglected to include in the list Joe sent yesterday afternoon:

National Compliance Evaluation Template for Tanks Inspections

Region 8 ECEJ staff has created an inspection report template for oil and gas tanks inspections in an effort to
streamline inspection data collection and generation of compliance evaluation reports. Region 8's template is
being shared with the National OOOO/OOOOa Workgroup, with the goal of generating a national template for
these types of inspections. Region 8 is also working on integrating this template into the data collection tool
described below.

Thanks,

Sara

Hi Suzanne, we threw together a few items that we are working on in the air enforcement group addition to our enforcement efforts in the oil and gas sector. Please let us know if you have any questions. Thanks!

- Region 8 ECEJ staff have leveraged research funding sources to (1) better characterize emissions from oil & gas
 activities, (2) develop protocols for emission measurement to build a foundation for compliance tools in the
 future, and (3) build collaborative relationships with, and training opportunities for, state and tribal staff. This
 effort also has the less tangible benefit of demonstrating emission sources of interest to the EPA to the operator
 community. These projects include:
 - Pneumatic controller emission measurements in the Uinta Basin and DJ Basin (both ozone nonattainment areas). Protocols were developed to identify malfunctioning controllers and to measure emissions to determine compliance with the NSPS OOOO 6 cubic feet per hour limit.
 - Aerial and ground-based IR survey of hundreds of wellpads in the Uinta Basin to determine efficacy of helicopter-based IR surveys to identify compliance concerns and identify prevalence of "super-emitters" in this remote, geographically dispersed area. Ground-based IR surveys were conducted concurrently and further documented the prevalence of observed tank emissions not making it to intended control devices.
 - Pressurized liquids and raw gas sample collection and analysis in the Uinta Basin. Using information learned from a Noble Energy settlement project, EPA provided technical support in developing a scope of work for

this Utah-led field study. As we learned from our Noble work, improperly collected/analyzed samples result in an underestimate of tank emissions which are key to determining applicability to NSPS OOOO.

- LDAR Data Auditing Tool (DAT)
 - Region 8 is spearheading development of an innovative targeting/compliance auditing tool for fugitive emission/LDAR cases in oil and gas and other industry sectors. In total, fugitive emissions/equipment leaks are regulated under at least 54 federal subparts, and account for a significant portion of the VOC and HAP emitted from regulated sites. Development of the LDAR DAT directly supports objectives under the Air Toxics, Energy Extraction, and RCRA/Air National Compliance Initiatives.
- Compliance assistance
 - Region 8 has provided additional assistance to other organizations around the country on compliance evaluations of oil and gas and chemical industry operations. In 2018, for example, assistance was provided to Regions 4, 5, 6, and CID specifically related to fugitive emissions cases.
- Innovative fenceline monitoring solutions
 - As part of the national model for relief in fugitive emissions enforcement cases, Region 8 has worked with ORD and taken a leadership role to identify technologies/vendors of real-time fenceline monitoring solutions which can act as early-warning systems for large leaks. Region 8 is connecting oil and gas companies with alleged violations of fugitive emission standards to these technology vendors, with the hope these solutions can reduce VOC emissions in nonattainment areas and act as an additional layer of assurance that compliance with fugitive emission requirements is being achieved.
- Oil and gas inspection data collection tools development
 - Region 8 has invested resources to develop innovative field data collection tools to assist with oil and gas facility compliance assessments, and to more quickly inform decision-making processes. The tools have been used to track field records and develop inspection reports for over one hundred facilities in the Uinta Basin to date.

Joe Wilwerding

USEPA Region 8, Office of Enforcement, Compliance & Environmental Justice 1595 Wynkoop Street, Denver, CO 80202-1129 (303) 312-6729, wilwerding.joseph@epa.gov